

ABSTRACT

A method for storing data, consisting of distributing a first plurality of groups of logical addresses among one or more storage devices in a storage system, receiving a second plurality of data-sets containing the data to be stored, and assigning each data-set among the plurality of data-sets a random number chosen from a first plurality of different numbers.

The method further consists of partitioning each data-set into multiple partitions, so that each partition among the multiple partitions receives a sequential partition number, assigning each partition within each data-set to be stored at a specific group of logical addresses in the storage system in accordance with the sequential partition number of the partition and the random number assigned to the data-set, and storing each partition in the storage system at the assigned specific group of logical addresses.